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Rates of admission to six Northern Ireland psychiatric hospitals of patients with primary alcohol-related diagnoses

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SUMMARY

The rate of admissions to psychiatric hospitals of patients with primary alcohol-related diagnoses (PARD) has increased from 1971 to 1983 and they now account for 19.7% of all admissions. There is a wide variation in admission rates between hospitals, and the use of the Mental Health (NI) Act 1961 to admit these patients formally varies up to twelvefold.

INTRODUCTION

Until recently it was assumed that there were large regional variations in alcohol-related problems in Britain between north and south [1] and also between different regions in Scotland.[2] These assumptions were based on officially recorded levels of alcohol-related mortality, crimes and alcohol admissions. Crawford et al [3] suggested that patterns of alcohol consumption did not differ in a manner consistent with the much higher rate of alcohol-related problems recorded in certain regions. They further suggested [4] that the differences in psychiatric admissions for alcohol dependence, abuse and psychosis could be largely explained by admission policies.

The use of Mental Health Acts in Britain for the formal admission to psychiatric hospitals of people with primary alcohol-related diagnoses also seems to vary. There is scant literature on the use of the Mental Health (NI) Act 1961 and of the position in England and Scotland which have similar but not identical acts. Szmukler, in a community study in London in 1976-1978 showed alcoholic admissions under the English act to be less than 1% of all compulsory detentions,[5] and McKechnie et al showed in Scotland in 1974-1979 a figure of 15.4%.[6] In Australia, alcoholics account for just under 7% of all compulsory detentions.[7]

Nosologically, abuse of or addiction to alcohol occupies an uncertain place in psychiatry and after many years the concept of alcoholism as a disease is falling out of favour, to be recategorised as a social and political problem.[8] Dependence on alcohol without concomitant mental illness is mentioned clearly in the new

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Mental Health (NI) Order 1986 as a condition which may not be used as a reason for compulsory admission, i.e. it is not a mental illness. This Order becomes law on 1 August 1986.

It was decided therefore to ask three questions with regard to Northern Ireland practice for primary alcohol-related diseases.

1. Have the number of admissions increased in recent years?
2. Have the rates of admissions varied between hospitals?
3. Does the use of the Mental Health (NI) Act 1961 to admit patients vary throughout the Province?

METHOD

The study years were 1971 to 1983. Northern Ireland is divided into six catchment areas, each serviced by its own general psychiatric hospital. Two of these hospitals have alcohol treatment units which deal exclusively with alcohol-related problems. In addition, three of these areas have in-patient psychiatric facilities within general hospitals and these are affiliated to the general psychiatric hospital in the area. Admission figures to these general hospital units have been included with those of their respective general psychiatric hospitals in this report. A description of the hospitals included is given in the Table.

There are two autonomous psychiatric units within general hospitals in the Greater Belfast area — Windsor House (at the Belfast City Hospital) and the unit at the Mater Infirmorum Hospital. These units have been excluded from the study because they do not have a defined catchment area population. Attendance at psychiatric day hospitals, of which there are two in Belfast, and of day patients and out-patients have not been included as the criterion of inclusion in the study was: 'Do these people require in-patient treatment?' The regional unit for drug and alcohol dependence in Shaftesbury Square was excluded because it is not a general psychiatric unit and it does not have a defined catchment area. It is recognised that each of the above omissions will limit any inferences which can be drawn from the results.

The International Classification of Diseases was used to define the number of admissions. The categories included were:

1971-1980	Alcoholism and alcoholic psychosis ICD8 No. 291, 303
1981-1983	Alcoholic psychosis, alcohol dependence syndrome and non-dependent use of alcohol ICD9 No. 291, 303, 305.O.

The data for admissions for the years 1971-1983 in the above categories was obtained from the DHSS (NI) which analyses the Mental Health Record forms (MHR4) completed on every admission to a psychiatric unit or hospital. The primary diagnosis only was used, and alcohol-related problems secondary to other mental illnesses were not counted.

RESULTS

The Table shows the percentage change in catchment population, total psychiatric admissions and admissions with primary alcohol-related diagnoses from 1971 to 1983.

There has been a considerable shift in the distribution of the population in Northern Ireland over these years and this Table attempts to show the changes in admissions in context. No matter what happened to catchment populations or

psychiatric admissions in general, all hospitals showed an increase in admissions between 1971 and 1983 ranging from 18.3% to 261.1%. These increases were much greater than any relative or absolute increase in psychiatric admissions.

TABLE

1971-1983: changes in catchment populations, total admissions and alcohol-related admissions for six psychiatric hospitals

Hospitals (see below)	*% Change in catchment population*	*% Change in all psychiatric admissions*	*% Change in all alcohol admissions*
A	+13.8	+57.61	+132.89
B	−22.58	−14.73	+18.27
C	+7.84	−6.40	+65.67
D	+13.38	+8.05	+62.30
E	+11.32	+19.93	+126.44
F	+9.23	+57.73	+261.11

Description of hospitals

A. Downshire Hospital and Ards Hospital.	County psychiatric hospital with an alcohol unit. Associated in-patient psychiatric facilities in a general hospital.
B. Purdysburn Hospital.	General psychiatric hospital with a predominantly urban catchment area.
C. Tyrone and Fermanagh Hospital.	County psychiatric hospital with an alcohol unit.
D. Holywell and Whiteabbey Hospitals.	County psychiatric hospital. Associated in-patient psychiatric facilities in a general hospital.
E. Gransha Hospital.	General psychiatric hospital with a mixed urban and rural catchment area.
F. St. Luke's and Craigavon Hospitals.	County psychiatric hospital. Associated in-patient psychiatric facilities in a general hospital.

Selecting three years which represent the overall trends, the rates of first admissions to the six hospitals in 1971, 1977 and 1983, per 100,000 population, are shown in Fig 1. Wide variation in the rates can be seen — there was a threefold difference between the lowest (Holywell) and the highest (Gransha) in 1971, and the same pattern of variation persisted in 1977 and 1983, although the absolute rates were higher in the later years.

The rates of formal admissions per 100,000 population, under the Mental Health (NI) Act 1961, for the same hospitals and years as shown in Fig 2, also show wide variations. In each year the lowest formal admission rate was to Holywell Hospital and the highest rate was to Gransha Hospital. All except Gransha Hospital had a lower rate in 1983 than in 1971.

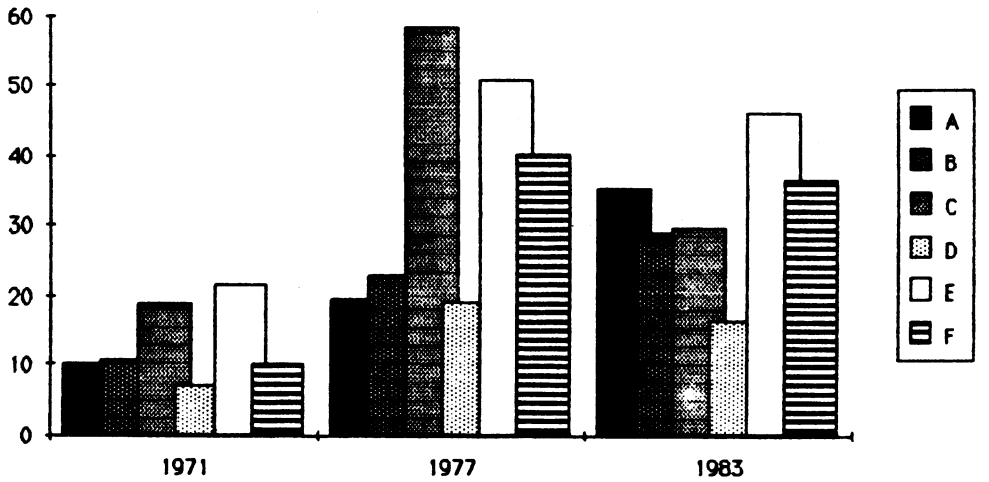

Fig 1. Rates of first admission with primary alcohol-related diagnoses per 100,000 population: by hospital.

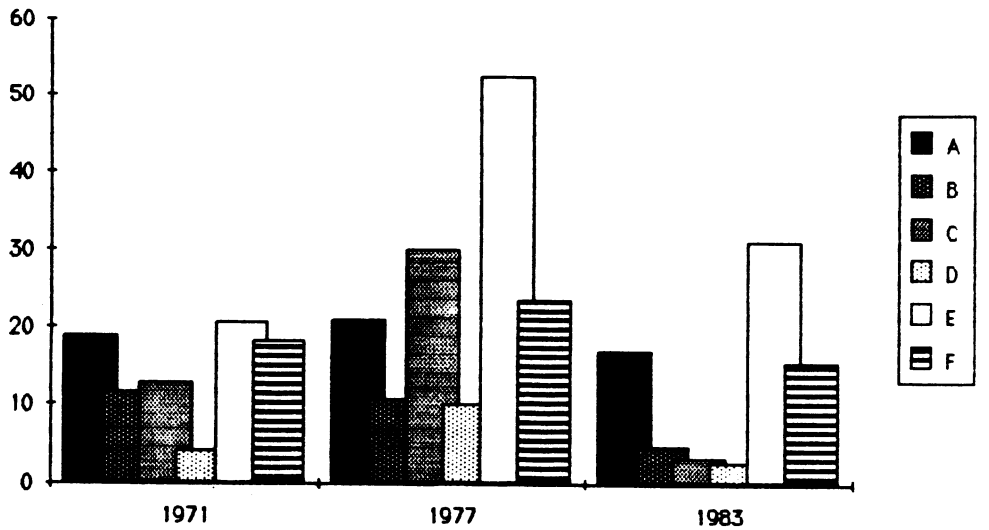

Fig 2. Rates of all formal admissions with primary alcohol-related diagnoses per 100,000 population: by hospital.

DISCUSSION

It is clear that there has been a definite increase in admissions with primary alcohol-related diagnoses since 1971, with a peak in most hospitals in 1977. This is not simply a result of an increase in all psychiatric admissions. The number of admissions between 1971 and 1983 has increased by 68.4% compared with an increase in Scotland between 1971 and 1981 of 33.6% [9] and an increase in England between 1972 and 1982 of 63.4%.[10]

In 1983, 19.7% of all admissions to general psychiatric hospitals in Northern Ireland were with primary alcohol-related diagnoses. The corresponding figures for England and the Republic of Ireland in 1982 were 9%[10] and 26%[11]

respectively. It is possible that the increase in the number of these admissions is a reflection of the increase in alcohol consumption as documented by WHO [12] and others.[13]

Poikolainen in Finland showed that an increase in alcohol consumption of 100% was mirrored by a doubling in the number of admissions for alcoholism and alcoholic psychosis.[14] Furthermore, liver cirrhosis mortality increased by 50% in this period in Finland. This has been described as a sensitive indication of alcohol consumption and the number of deaths due to cirrhosis has indeed increased steadily since World War II along with alcohol consumption.[13, 15] In the period 1971-1983, deaths due to cirrhosis of the liver have increased by 33%.[16] No figures are available for average amounts of alcohol consumed in Northern Ireland. Other explanations for the increase could be a change in admission policy of the hospitals, or a change in public opinion with respect to alcohol abuse — it could either be more acceptable to enter a psychiatric hospital for treatment or else more people believe that alcohol problems are caused by mental illness.

It is also clear that admission rates vary between hospitals, on average by a factor of threefold, between the lowest and the highest. This is similar to the threefold difference in 1982 for admission rates between the Regional Health Authorities in England with the lowest and highest rates.[10]

There are also wide variations in the use of the Mental Health Act, but these are not restricted to primary alcohol-related diagnoses. For all psychiatric diagnoses in 1983, the admission rate for all formal orders under the Act varied from 28 per 100,000 in the Tyrone and Fermanagh catchment area to 103.5 per 100,000 in the Gransha catchment area, which is a 3.7-fold difference.

It is difficult to explain these variations between hospitals both in the rate of admissions and the use of the Mental Health Act. Two local community surveys [17, 18] did not show any significant differences in prevalence rates for alcohol abuse between the four area boards, so this cannot explain the differences. The availability of specialised resources might affect the admission rate in either direction; however, this theory would appear to be negated by the considerable variation in admission rates between the Downshire Hospital and the Tyrone and Fermanagh Hospital, both of whom have specialist alcohol treatment units.

The admission policy of a hospital could also affect the use of formal orders,[4] but there are no studies which look specifically at compulsory detention and alcohol-related diagnoses.

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